

Please replace the paragraph on page 8, line 22 – page 9, line 17 with the following.

“ Telomerase may be assayed according to Kim and Wu, *Nucl. Acids Res.* 25: 2595-2597, incorporated herein by reference. Briefly, for the telomerase assay, 2µg of protein extract is used. The extract is assayed in 50µl of reaction mixture containing 0.1 µg TS substrate primer (5'-AATCCGTCGAGCAGAGTT-3' (SEQ ID NO 5569) end-labeled using alpha-³²P-ATP and T4 polynucleotide kinase) (SEQ ID NO 5570) 0.1µg ACX return primer (5'-GCGCGG[CTTACC]₃ CTAACC-3'), 0.1 µg NT internal control primer (5'-ATCGCTTCTCGGCCTTTT-3') (SEQ ID NO 5571) 0.01 micromol TSNT internal control template (5'-AATCCGTCGAGCAGAGTTAAAAGGCCGAGAACGAT-3') (SEQ ID NO 5572) 50 µM each deoxynucleoside triphosphate, 2 U of Taq DNA polymerase, and 2 µl CHAPS protein extract, all in 1X TRAP buffer (20 mM Tris (pH 8.3), 68 mM KCl, 1.5 mM MgCl₂, 1 mM EGTA, 0.05% Tween 20). Each reaction is placed in a thermocycler block preheated to 30 C and incubated at 30 C for 10 minutes, then cycled for 27 cycles of 94 degrees C for 30 seconds, 60 degrees C for 30 seconds. Reaction products are separated on a denaturing 8% polyacrylamide gel, followed by drying of the gel and autoradiography. The internal control (to control for possible Taq polymerase inhibition) generates a band of 36 nt. Comparison of radioactive signal integrated (e.g., by phosphorimager analysis) for telomerase-extended bands with the radioactive signal from a reaction performed with a known amount of quantification standard template (termed R8; 5'-AATCCGTCGAGCAGAGTTAG [GGTTAG]₇-3') (SEQ ID NO 5573) allows expression of telomerase activity as an absolute value. The absolute value = TPG (total product generated) = $[(TP-TP_i)/TI]/[(R8-B)/RI] \times 100$, where TP = telomerase products from test extract, TP_i = telomerase products from a heat-inactivated (75 C, 10 minutes) extract reaction, TI = the signal from the internal control, R8 = the signal from the R8 qualification standard template reaction, B = signal from a lysis buffer-only blank reaction, and RI = the internal control value for the reaction containing R8 template and NT and TSNT control primers. TPG values of 0-10,000 are possible, with the linear range being from approximately 1

to 1000 TPG. The range of 1 to 1000 TPG encompasses the minimum and maximum levels of telomerase activity in most tumor samples tested, while non-tumor cells most often have no telomerase activity (TPG approximately zero). ”

On page 16, please replace the paragraph at lines 1-8 with the substitute paragraph:

“ By “consists essentially of” is meant that the active ribozyme contains an enzymatic center or core equivalent to those in the examples, and binding arms able to bind mRNA such that cleavage at the target site occurs. Other sequences may be present which do not interfere with such cleavage. Thus, a core region may, for example, include one or more loop or stem-loop structure, which does not prevent enzymatic activity. The underlined regions in the sequences in Tables III and IV can be such a loop, and can be represented generally as sequence “X”. For example, a core sequence for a hammerhead ribozyme can be 5'-CUGAUGAG-3' and 5'-CGAA-3' connected by “X”, where X is 5'-GCCGUUAGGC-3' (SEQ ID NO 5574), or other stem II region known in the art. ”

A marked up copy of the specification showing changes made by amendment is attached as **APPENDIX A**.

Please replace originally filed Tables III-VII (pages 53-129, as filed) with the substitute Tables III-VII, renumbered pages 53-129.

In the Abstract:

On page 133 (as originally filed), please replace the originally-filed abstract with the following substitute abstract (substitute page 133):

“ The present invention relates to nucleic acid molecules which modulate the synthesis,